

## [PRELIMINARY AMENDMENT]

## PATENT APPLICATION

the objective lens, said deflection unit (12C) being arranged between the particle mirror (14) and the objective lens (10).

6. (Amended) The charged particle device (1) according to claim 1 wherein the particle mirror (14) is tilted with regard to the optical axis (6) by an angle  $\alpha$  between about 20 and about 70 degrees, preferably between about 40 and about 50 degrees, most preferably about 45 degrees.

7. (Amended) The charged particle device (1) according to claim 1 wherein the particle mirror (14) comprises a conductive surface (21) or a conductive deflecting grid (41) kept on a predetermined potential sufficient to deflect all particles having less than a predetermined energy.

9. (Amended) The charged particle device (1) according to claim 7 wherein the particle mirror (14) comprises a particle absorber (23) for absorbing particles having more than the predetermined energy.

10. (Amended) The charged particle device (1) according to claim 7 wherein a second detector (24) is arranged behind the conductive deflecting grid (41) for detecting particles having more than the predetermined energy.

11. (Amended) The charged particle device (1) according to claim 1 wherein a high pass filter (3) is arranged in front of the detector (16), allowing only particles having an energy above a predetermined energy to enter the detector.

13. (Amended) The charged particle device (1) according to claim 1 wherein said drift region (26) is positioned away from the optical axis (6) of the objective lens (10), so that all charged particles coming from the specimen within an angle  $\gamma \leq 5$  degrees, preferably  $\leq 10$

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degrees, as measured from the optical axis (6) of the objective lens (10), hit the deflecting region (25) of the mirror (14).

17. (Amended) The particle mirror (14) according to claim 15 wherein the particle mirror (14) further comprises a particle absorber (23) for absorbing particles having more than the predetermined energy.

18. (Amended) The particle mirror (14) according to claim 14 wherein deflecting region (25) deflects the particles, so that the angle between the outgoing path of the particle and the axes normal to the front surface of the mirror, at the point where the particle hits the mirror, equals the angle between the incoming path of the particle and the axes normal to the front surface of the mirror.

23. (Amended) The charged particle device (1) according to claim 21 wherein the particle mirror (14) comprises a particle absorber (23) for absorbing particles having more than the predetermined energy.

24. (Amended) The charged particle device (1) according to claim 20 wherein the particle mirror (14) comprises a deflecting region (25) located on the front surface (27) for deflecting all particles in a given velocity range and in a given angular range, so that the angle  $\beta_o$  between the outgoing path of the particle and the axes normal to the front surface of the mirror, at the point where the particle hits the mirror, equals the angle  $\beta_i$  between the incoming path of the particle and the axes normal to the front surface of the mirror.

25. (Amended) The charged particle device (1) according to claim 20 wherein the particle mirror (14) is tilted with regard to the optical axis (6) by an angle  $\alpha$  between about 20 and about